UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,286	04/02/2001	Linda C. Burkly	A006 US CON	2466

7590 09/27/2002

BIOGEN, INC.
14 Cambridge Center
Cambridge, MA 02142

EXAMINER
O HARA, EILEEN B

ART UNIT	PAPER NUMBER
1646	

DATE MAILED: 09/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/824,286	BURKLY ET AL.	
	Examiner	Art Unit	
	Eileen B. O'Hara	1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 July 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-58* is/are pending in the application.

4a) Of the above claim(s) *29-58* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-58* are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 April 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-58 are pending in the instant application.

Election/Restrictions

2. Applicant's election without traverse of Group I, claims 1-28 in Paper No. 5 is acknowledged.

Claims 29-58 are withdrawn as being drawn to a non-elected invention.

Claims 1-28 are currently under examination.

Priority

3. An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification (37 CFR 1.78). This application filed under former 37 CFR 1.62 lacks the necessary reference to the prior applications. A statement referencing the prior applications should be entered following the title of the invention or as the first sentence of the specification.

Drawings

4. The drawings are objected to because the different sections of the same figure should have capital letters instead of lower case letters. For example, Figure 2 should be labeled 2A, 2B, 2C and 2D instead of 2a, 2b, 2c and 2d. Figures 3, 13 and 15 should also be corrected.

Applicant is required to file an amendment under 37 C.F.R. § 1.312 to change the Brief Description of the Drawings and the rest of the specification accordingly. If, for example, Figure

1 is divided into Figures 1A, 1B and 1C then the Brief Description and all references to this figure in the specification must refer to Figures 1A, 1B and/or 1C.

Correction is required.

Oath/Declaration

5. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: It was not executed in accordance with either 37 CFR 1.66 or 1.68. Priority to PCT/US/97/07870 should be claimed under 35 U.S.C 120, **not** 35 U.S.C. 119.

Specification

6.0 The disclosure is objected to because of the following informalities:

6.1 The address of the ATCC has been changed. An amendment of the specification to recite the present complete name and address of the depository, is required.

The correct address is:

American Type Culture Collection

10801 University Boulevard

Manassas, VA 20110-2209

Please correct on page 55 of the specification.

Also, An ATCC Accession No: is missing on page 6, line 13 of the instant specification.

6.2 On page 11, line 7 of the instant specification, the first "Closed circles" should be "Open circles" to match the figure.

6.3 On page 6, line 25, there is a copyright sign before the word "polynucleotides" that should be deleted.

Appropriate correction is required.

Claim Objections

7. Claims 1-13, 17, 18, 20-26 and 28 are objected to because of the following informalities:

7.1 Claims 1, 2, 5, 25 and 26 are objected to because they encompass non-elected inventions (those other than antibodies), which should be deleted from the claims.

7.2 Claims 1, 2, 22, 24, and 25 are objected to because "gc chain" should be spelled out "common gamma chain of interleukin receptors" in the independent claims for clarity. Additionally, "common gamma chain of interleukin receptors" should also be written out for claim 20.

7.3 Claims 2-13 and 22-26 are objected to because the word "chain" is missing after "gc" in the claims, whereas in claims 1, 20, 24 and 27 the term "gc **chain**" appears. It is recommended that "chain" be inserted in the other claims for consistency.

7.4 Claim 11 is objected to for having two periods at the end of the sentence.

7.5 Claim 17 is objected to because the word "add" at the end of the second line should be changed to "and".

7.6 The word "a" should be inserted between "by" and "hybridoma" in claim 18.

7.7 Claim 20 is objected to under 37 C.F.R. 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. The claim is dependent upon claim 19, which is drawn to a polynucleotide. Claim 20 is drawn to a polypeptide. The test as to whether a claim is a proper dependent claim is that it shall include every limitation of the claim from which it depends (35 U.S.C. 112, fourth paragraph) or in other words that it shall not conceivably be infringed by anything which would not also infringe the basic claim (MPEP § 608.01(n)). Because claim 20 is drawn to polypeptides, it can be readily infringed by a polypeptide which would not infringe the polynucleotide of claim 19, which is a materially different compound. Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form.

7.8 Claim 21 is objected to because "NO.: 5" should be rewritten as "NO: 5".

7.9 Claim 23 is objected to because the redundant "having a" in the first line should be removed.

7.10 Claim 28 is objected to because the period is missing at the end of the sentence.

Appropriate correction is required.

Double Patenting

8.1 A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The

filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 6-9, 12-18, 20, 21, 22, 23 and 24 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 16-19, 1-3, 15, 5, 9, 10, 11, 12 and 13-15, respectively of prior U.S. Patent No. 6,323,027. This is a double patenting rejection.

8.2 The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2, 5, 11, 21 and 25-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,323,027. Although the conflicting claims are not identical, they are not patentably distinct from each other because they encompass a gc chain blocking agent that has the property of significantly blocking the response of a cell of a mammal to interleukin-2, that is a monoclonal antibody that does not require a second compound which affects response of the cell to IL-2, wherein the monoclonal antibodies and hybridomas producing them have the accession numbers and the nucleotide and polypeptide sequences listed in the claims that are identical to that of patent 6,323,027, but are broader or narrower in scope.

Claims 1, 2 and 5 are of the instant application are broader in scope than the patent because they are drawn to gc chain blocking agents that are monoclonal antibodies as well as other types of agents such as a mimetic agent or are drawn to an agent that interacts with IL-2 receptor chain of a different species of animal, and it would be obvious for the skilled artisan to identify a blocking agent to a different species of animal in order to treat that animal. Claims 25-28 of the instant application are also narrower in scope than claims of the patent since they are drawn to a "pharmaceutical composition" and not just a composition, and it would be obvious to the skilled artisan to make the gc chain agent in a pharmaceutical composition in order to administer it to a subject or animal.

For example, claims 11 and 28 of the instant application are drawn to monoclonal antibody CP.B8, but in the patent monoclonal antibody CP.B8 (produced by hybridoma cell line ATCC No. HB-12107) is claimed in claim 10 with other monoclonal antibodies which is therefore broader in scope.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9.1 Claims 6-11, 17, 18 and 28 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims expressly require the deposited material referred to

therein to practice the invention. Applicants referral to the deposits of hybridomas AF.F4, CQ.C11, AE.C9 and CP.B8 on page 55 of the specification is an insufficient assurance that all of the conditions of 37 CFR sections 1.801 through 1.809 have been met. If the deposits were made under the provisions of the Budapest Treaty, filing of an affidavit or declaration by applicants, assignees or a statement by an attorney of record over his or her signature and registration number stating that the deposits have been accepted by an International Depository Authority under the provisions of the Budapest Treaty, that all restrictions upon public access to the deposits will be irrevocably removed upon the grant of a patent on this application and that the deposit will be replaced if viable samples cannot be dispensed by the depository is required. This requirement is necessary when deposits are made under the provisions of the Budapest Treaty as the Treaty leaves these specific matters to the discretion of each State. Although an affidavit or declaration was filed in the parent case 09/189,129, a new statement that designates the present application number is required.

9.2 Claims 1-5 and 12-16, 19-21 and 25-27 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for monoclonal antibodies CP.B8, CQ.C11, AF.F4, AK.F12 and AE.C9, the hybridomas that produce them, fragments of those monoclonal antibodies, and antibodies that cross compete with them, does not reasonably provide enablement for any other gamma chain blocking agent. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The term "gc chain blocking agent" encompasses any compound that can bind to the

common gamma chain of interleukin receptors and prevent them from transmiting a signal. Because claims 1, 2, 5, 25 and 26 recite a functional limitation in the absence of any structural limitations, they are analagous to a single means claim which emcompasses any agent that can function as a gamma chain blocking agent. A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt , 708 F.2d 712,>714 - 715,< 218 USPQ 195>, 197< (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor. See M.P.E.P. 2164.08(a). In the instant case, no "agent" other than an antibody is disclosed or suggested by the instant specification and the prior art. To identify a gc binding agent other than an antibody would require undue experimentation to either design and test compounds or in screening a plethora of compounds to determine if any bind to common gamma chain of interleukin-2 receptor and block activity. Due to the large quantity of experimentation necessary to generate the number of agents recited in the claims and screen same for activity, the lack of direction/guidance presented in the specification regarding which structural features are required in order to provide activity, the absence of working examples other than monoclonal antibodies and written description directed to same, the complex nature of the invention, the state of the prior art which establishes that more than one antibody was required for blocking activity, and the breadth of the claims

which fail to recite any structural or functional limitations, undue experimentation would be required of the skilled artisan to make and/or use the claimed invention in its full scope.

Claims 19 and 21 are also not enabled because they encompass a polynucleotide that hybridizes to a polynucleotide that encodes at least a part of a polypeptide having the property of significantly blocking a response of a cell to interleukin-2, but as written the encoded polypeptide may comprise a part of a gc blocking antibody, but itself would not necessarily be a gc blocking antibody, and the specification has not taught the skilled artisan how to use a polynucleotide that hybridizes to a polynucleotide that encodes a gc blocking antibody but that does not itself encode a gc blocking antibody.

9.2 Claims 1-5 and 12-16, 19-21 and 25-27 are also rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification discloses common gamma chain blocking agents which are monoclonal antibodies CP.B8, CQ.C11, AF.F4, AK.F12 and AE.C9. However, the claims as written include other agents besides these monoclonal antibodies. The instant disclosure of the five monoclonal antibodies with the instantly disclosed specific activities, does not adequately support the scope of the claimed genus, which encompasses a substantial variety of subgenera. A genus claim may be supported by a representative number of species as set forth in *Regents of the University of California v Eli Lilly & Co,* 119F3d 1559, 1569, 43 USPQ2d 1398, 1406 (Fed. Cir. 1997), which states: "To fulfill the written description requirement, a patent specification must describe an invention and do so in sufficient detail that one skilled in the art can clearly conclude that "the inventor

invented the claimed invention." Lockwood v. American Airlines, Inc. , 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (1997); In re Gosteli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) (" [T]he description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed."). Thus, an applicant complies with the written description requirement "by describing the invention, with all its claimed limitations, not that which makes it obvious," and by using "such descriptive means as words, structures, figures, diagrams, formulas, etc., that set forth the claimed invention." Lockwood , 107 F.3d at 1572, 41 USPQ2d at 1966.

An adequate written description of a DNA, such as the cDNA of the recombinant plasmids and microorganisms of the '525 patent, "requires a precise definition, such as by structure, formula, chemical name, or physical properties," not a mere wish or plan for obtaining the claimed chemical invention. Fiers v. Revel , 984 F.2d 1164, 1171, 25 USPQ2d 1601, 1606 (Fed. Cir. 1993). Accordingly, "an adequate written description of a DNA requires more than a mere statement that it is part of the invention and reference to a potential method for isolating it; what is required is a description of the DNA itself." Id. at 1170, 25 USPQ2d at 1606.

In the instant case, there would need to be enough information disclosed as far as what other types of agents besides antibodies would have common gamma chain blocking activity. Given the fact that the specification fails to provide any evidence that the additional agents are indeed species of the claimed genus it cannot be established that a representative number of species have been disclosed to support the genus claim.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 2-16, 19-21, 23 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10.1 Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The words "**a cell**" are missing between "response of" and "to IL-2".

10.2 Claims 19-21 are indefinite because claims 19 and 21 encompass a nucleic acid molecule which hybridizes under "standard hybridization" conditions. Though the specification on page 14 describes various hybridization and wash conditions, they are exemplary. The term **standard hybridization consitions** is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.

10.3 Claims 3 and 4 are indefinite because Claim 1 recites the limitation "blocking occurs without any requirement for a second compound", and claims 3 and 4 recite "wherein the required second compound is". There is insufficient antecedent basis for this limitation in the claims.

10.4 Claim 5 is indefinite because is encompasses a gc blocking agent that interacts with IL-2 receptor chain of a different species of mammal, but there is no mammal in claim 2, from which it depends.

10.5 Claim 17 is indefinite because it recites "A **continuous** hybridoma cell line", and it is not clear how this cell line differs from a hybridoma cell line.

10.6 Claim 27 is indefinite because the term "specifically binds" is not defined in the specification and it is not clear what this means.

10.7 Claims 26-28 are indefinite because claim 26 recites the term "antibody homolog", and it is not clear what is meant by this term. Page 18 of the specification defines "antibody homolog", but included in the definition is "component polypeptides of an antibody homolog, include, but are not limited to, intact immunoglobulins of types IgA, IGG,...", and it is confusing that an antibody homolog can also an antibody.

10.8 Claim 25 and dependent claims 26 and 27 are indefinite because claim 25 encompasses a pharmaceutical composition comprising a common gamma chain of cytokine receptors blocking agent, and there is no recitation of an amount of the blocking agent that would be "effective" for activity. A composition could only contain one molecule of the blocking agent, but this would not be enough to have a pharmaceutical effect.

10.9 Claims 10, 17 and 18 are indefinite because there are no ATCC numbers in the claims, and until a deposit number is entered, the claims are indefinite.

10.10 The other claims are rejected for depending upon a rejected claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11.1 Claims 1, 3-5 and 25-27 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Nakazawa et al, EP 0 621 338 A2, Oct. 26, 1994. Claim 1 encompasses a common gamma chain blocking agent, claims 3-5 encompass the a common gamma chain blocking agent that requires a second compound which could be an antibody specific to an antigenic determinant of a human IL-2 receptor chain for activity and wherein the agent interacts with IL-2 receptor chain of a different species of mammal, and claims 25-27 encompass a pharmaceutical composition consisting such a blocking agent that could be a monoclonal antibody that specifically binds to an antigenic determinant of the gamma chain of cytokine receptors. Nakazawa et al disclose a monoclonal antibody which specifically binds to the gamma chain of human interleukin-2 receptor (blocking agent), that requires a second compound for activity that is a monoclonal antibody (see Figures 7 and 8), and wherein the agent interacts with IL-2 receptor chain of a different species of mammal (page 3, lines 55-56) and pharmaceutical compositions (see entire patent). Therefore, Nakazawa et al. anticipates the claims.

11.2 Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Hudson et al, Accession No. M83538, Sequence database genbank110, embl157, Jan. 10, 1992. Claim 21 encompasses a monoclonal antibody having complementary determining regions encoded by a polynucleotide that would hybridize to either of the polynucleotides comprising the nucleic acid

sequences presented in SEQ ID NOS: 5 and 6 under "standard hybridization conditions". Hudson et al disclose a nucleic acid sequence that has 89.7% total sequence identity to that of SEQ ID NO:5, and identified as antibody light chain variable chain VL (see attached sequence alignment). Under many "standard hybridization conditions" a nucleic acid molecule with this sequence would be expected to hybridize to the nucleic acid molecule comprising the nucleic acid sequence of SEQ ID NO:5, and since this sequence is identified as a antibody light chain variable domain and there is no limitation that the monoclonal antibody be a gc blocking agent, Hudson et al. anticipates the claims.

The art considered pertinent to the present application and cited in parent application 09/189,129 is:

(a) Cabilly et al, EP 0 125 023 A, Nov. 14, 1984, also sequence database a-geneseq32, Accession No. P40031. Claim 22 encompasses a gc blocking agent that is an antibody having a light chain variable region CDR with an amino acid sequence selected from the group consisting of .....(b) amino acids 50 to 56 of SEQ ID NO:4..... Cabilly et al disclose a monoclonal antibody having this sequence, however, the monoclonal antibody of Cabilly et al. is an anti-CEA antibody and does not teach an anti-common gamma chain antibody as recited in the claim.

(b) Courtenay-Luck, WO 92/18534 (cited by Applicants). Claim 23 encompasses a "gc blocking agent...that is an antibody having a heavy chain variable region CDR with an amino acid sequence selected.....(a) 28 to 32 of SEQ ID NO:3:....". Courtney-Luck discloses a monoclonal antibody VH domain with a CDR that matches amino acids 28 to 32 of SEQ ID NO:3 (see page 30, Table 4, (CDR1 boxed)), however the monoclonal antibody of Courtenay-

Luck is a monoclonal antibody against a mucin associated with tumors and does not teach an anti-common gamma chain antibody as recited in the claim.

Conclusion

12. No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eileen B. O'Hara, whose telephone number is (703) 308-3312. The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached at (703) 308-6564.

Official papers Before Final filed by RightFax should be directed to (703) 872-9306.

Official papers After Final filed by RightFax should be directed to (703) 872-9307.

Official papers filed by fax should be directed to (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Eileen B. O'Hara, Ph.D.

Patent Examiner

LORRAINE SPECTOR
PRIMARY EXAMINER